General Purpose PNP Epitaxial Planar Transistor

BTP8550BA3

Description

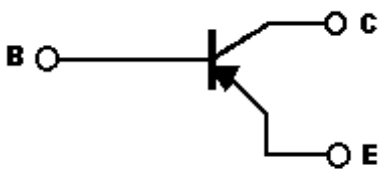
The BTP8550BA3 is designed for use in output amplifier of portable radios in class B push pull operation.

Features

- Large collector current , I_C= -1.5A
- Low $V_{CE(sat)}$
- Complementary to BTN8050A3.

Symbol

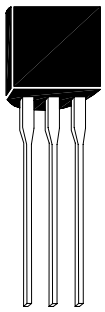
BTP8550BA3



B：Base
C：Collector
E：Emitter

Outline

TO-92



E B C

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current	I_C	-1.5	A
Base Current	I_B	-0.5	A
Power Dissipation	Pd	625	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	200	°C/W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	-40	-	-	V	I_C=-100μA
BV_{CEO}	-25	-	-	V	I_C=-2mA
BV_{EBO}	-6	-	-	V	I_E=-100μA
I_{CBO}	-	-	-100	nA	V_{CB}=-35V
I_{EBO}	-	-	-100	nA	V_{EB}=-6V
*$V_{CE(sat)}$	-	-	-0. 5	V	I_C=-800mA, I_B=-80mA
*$V_{BE(sat)}$	-	-	-1.2	V	I_C=-800mA, I_B=-80mA
*$V_{BE(on)}$	-	-	-1	V	V_{CE}=-1V, I_C=-10mA
*h_{FE} 1	45	-	-	-	V_{CE}=-1V, I_C=-5mA
*h_{FE} 2	85	-	500	-	V_{CE}=-1V, I_C=-100mA
*h_{FE} 3	40	-	-	-	V_{CE}=-1V, I_C=-800mA
f_T	100	-	-	MHz	V_{CE}=-10V, I_C=-50mA, f=100MHz
Cob	-	-	20	pF	V_{CB}=-10V, f=1MHz

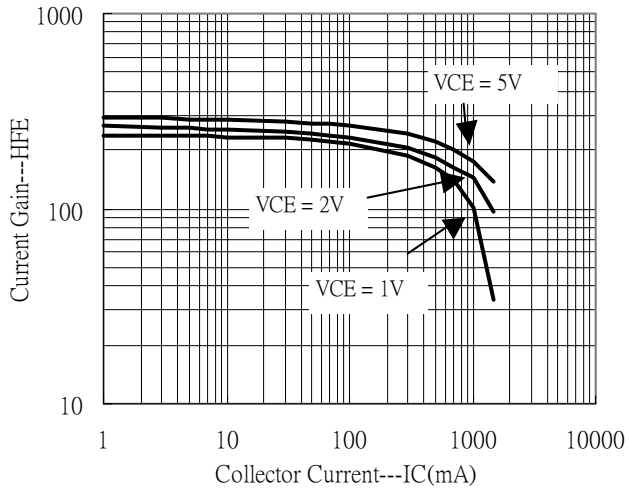
*Pulse Test: Pulse Width ≤380μs, Duty Cycle≤2%

Classification Of h_{FE} 2

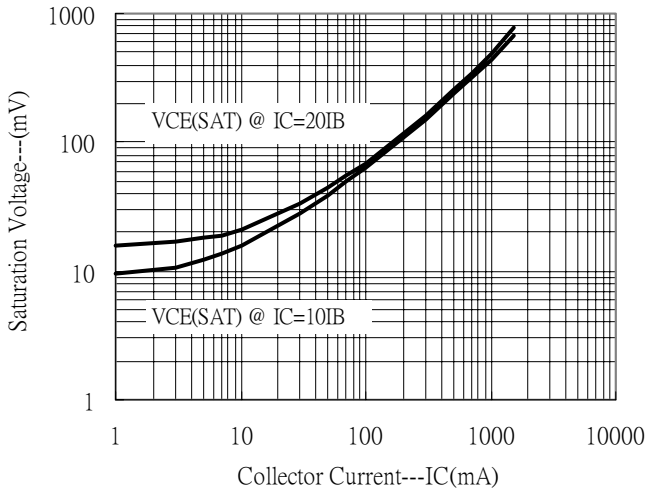
Rank	B	C	D	E
Range	85~160	120~200	160~320	250~500

Characteristic Curves

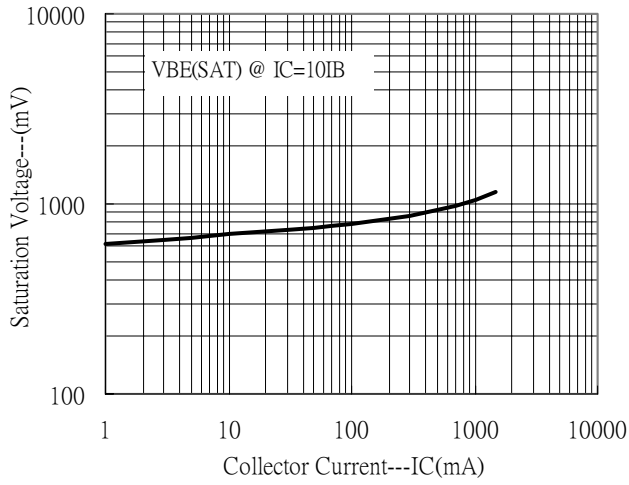
Current Gain vs Collector Current



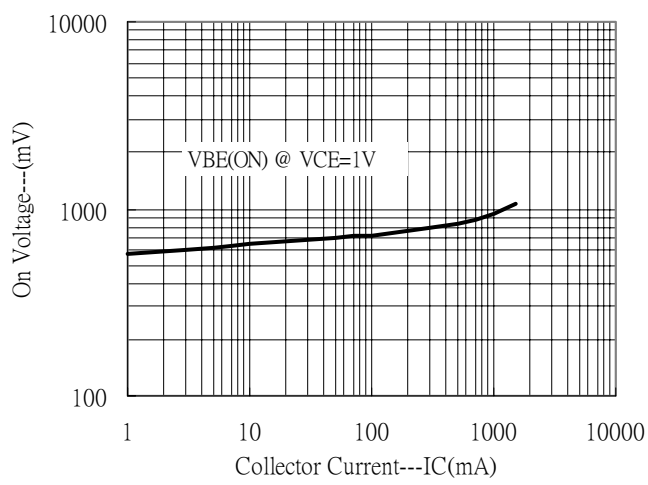
Saturation Voltage vs Collector Current



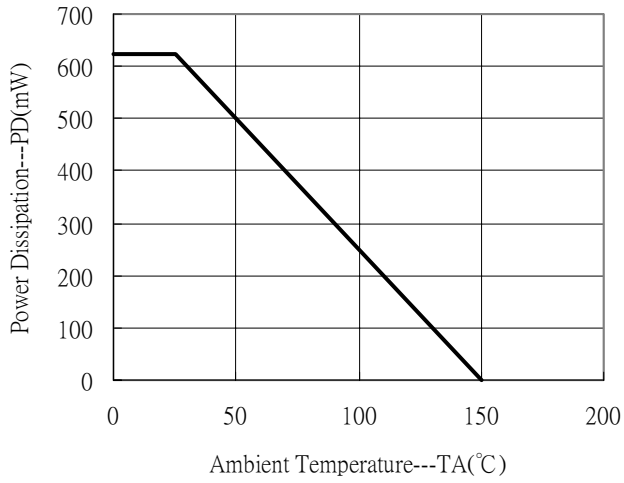
Saturation Voltage vs Collector Current



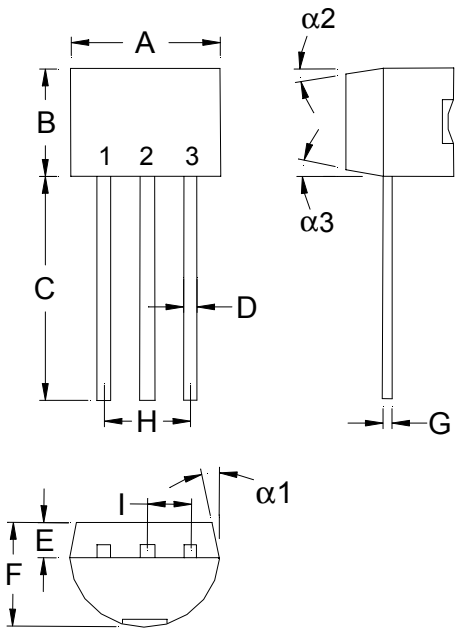
On Voltage vs Collector Current



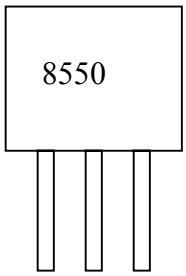
Power Derating Curve



TO-92 Dimension



Marking:



Style: Pin 1.Emitter 2.Base 3.Collector

3-Lead TO-92 Plastic Package
CYStek Package Code: A3

*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	α1	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	α2	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	α3	-	*2°	-	*2°

Notes: 1.Controlling dimension: millimeters.
2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material:

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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